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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/581,953	06/07/2006	Eiichiro Yokochi	CU-4850 BWH	7389
26530	7590	06/14/2007	EXAMINER	
LADAS & PARRY LLP			DICUS, TAMRA	
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SUITE 1600			PAPER NUMBER	
CHICAGO, IL 60604			1774	
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/581,953	YOKOCHI ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Tamra L. Dicus	1774	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☐ Claim(s) \_\_\_\_ is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>10-04-06</u> . | 6) <input type="checkbox"/> Other: ____.  |

## **DETAILED ACTION**

### ***Specification***

The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

The following title is suggested: A Decorative Multilayer Material Impregnated With Resin.

### ***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 1-12 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

3. Instant Claims 1-6 are not clear because it is not clear if the uppermost surface of the base material layer further comprises the impregnated paper, because the surface layer comprised the same impregnated paper. Which is further not clear because even if the base comprised the paper, it is already comprised in the surface layer. It is not clear if there is an additional second paper layer within the base. Claim 2 has similar issues with the blocking layer, since it is already part of the surface layer. Thus the overall structure for Claims 1-12 is not clear. It appears if additional layers are employed, "further comprising" language should be used.

4. Instant Claim 4 further is not clear what is intended by "the blocking layer has an embodiment of an independent blocking layer", it is unclear if the independent blocking layer is

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the same blocking layer or an additional one. Further it is unclear because “the impregnated paper without being impregnated in the impregnated paper” lacks antecedent basis both for an “impregnated paper without being impregnated” and an “in the impregnated paper” (a blocking layer in the impregnated paper). The overall structure is not clear for all the claims it depends from. Claim 6 has similar issues.

5. Further to Claim 6, it appears an element is missing – “an impregnated blocking layer impregnated” implies that something should be impregnated. Further it is not clear what layer comprises what, the blocking layer with in a paper or an impregnated paper. If there is no additional paper, using the same language to be consistent throughout the claims should be used. It is not clear what is intended by “in an inside of a surface side”.

6. Claims 9 and 12 recite a resin including an alkylene oxide. The resin should recite “comprises” instead of “including” to avoid confusion.

### ***Double Patenting***

7. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the “right to exclude” granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned

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with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

8. Claims 1-8, and 10 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-3 of U.S. Patent No. 6514624 to Takemoto in view of Takeuchi et al, and over claims 1-10 of US 6558799 to Takeuchi in view of Takemoto.

9. Takemoto teaches the same structure as instant claim 1 except the primer layer between the pattern and surface layer is not recited as a blocking layer, however because it is in the same position, and below the surface resin layer of curing resin, it functions as a blocking layer. See patented claims. The substrate of Takemoto is not claimed, however, Takeuchi teaches impregnated paper substrates. It would have been obvious to one having ordinary skill in the art to have modified the claims of Takemoto to envision a blocking layer and impregnated paper substrate because Takeuchi teaches the same order, using similar materials and the paper substrate is conventional for decorative materials (5:1-60, Examples, and all patented claims). Takeuchi essentially teaches all the same elements and order, but teaches curing layers in three layers, one may serve as a blocking layer, and the substrate of impregnating paper is missing. Takemoto teaches an impregnated paper in Example 1 as a suitable substrate. It would have been obvious to one having ordinary skill in the art to have modified the decorative material of Takeuchi because Takemoto teaches impregnated paper in Example 1 as a suitable substrate.

***Claim Rejections - 35 USC § 102***

10. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

11. Claims 1-8, and 10 are rejected under 35 U.S.C. 102(b) as being anticipated by Takemoto.

Takemoto teaches per instant claim 1 (currently amended), a decorative material comprising a surface layer (3, 2b, 2a, FIGs. 2-3 and associated text/ patented claim 1) and a base material layer (1, FIGs. 2-3 and associated text/ patented claim 1, impregnated paper) laminated and integrated on a rear surface thereof, wherein the surface layer comprises at least a surface resin layer (3, FIGs. 2-3 and associated text/ patented claim 1) comprised of a ionizing radiation curable resin, a blocking layer (primer, patented claim 1) for inherently blocking an ooze out of an uncured material (uncured from the upper layer) of a thermosetting resin, and an impregnated paper layer formed by a paper impregnated with the thermosetting resin and cured (1, FIGs. 2-3 and associated text, impregnated with same resin), laminated from a surface side; at least an uppermost surface of the base material layer comprises the impregnated paper layer (1 , FIGs. 2-3 and associated text); and a pattern ink layer (2, FIGs. 2-3 and associated text). Takemoto employs a two-component urethane resin as the ionizing impregnating resin (7:55-60). Claims 1-8 are met.

12. To instant claim 10, see 7:63-8:20.

13. Claims 1-8, and 10 are rejected under 35 U.S.C. 102(b) as being anticipated by Takeuchi et al.

Takeuchi teaches per instant claim 1 (currently amended), a decorative material comprising a surface layer (3, 2, the Figure and associated text) and a base material layer (1, the Figure and associated text) laminated and integrated on a rear surface thereof, wherein the surface layer comprises at least a surface resin layer (3, the Figure and associated text/ patented claim 1) comprised of a ionizing radiation curable resin, a blocking layer (2C, the Figure and associated text) for inherently blocking an ooze out of an uncured material (uncured from the upper layer) of a thermosetting resin, and an impregnated paper layer formed by a paper impregnated with the thermosetting resin and cured (1, the Figure 3 and associated text, impregnated with same resin), laminated from a surface side; at least an uppermost surface of the base material layer comprises the impregnated paper layer (1 , the Figure and associated text); and a pattern ink layers in several positions upper, mid, and lower (3:45-60). Takeuchi employs a two-component urethane resin as the ionizing impregnating resin (6:30-45). Claims 1-8 are met.

To instant claim 10, see 11:60-68.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person

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having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Arai et al.

Arai teaches per instant claim 1 (currently amended), a decorative material comprising a surface layer (1, 2, 6, 3, and 5, FIG. 4 and associated text) and a base material layer (4, FIG. 4 and associated text) laminated and integrated on a rear surface thereof, wherein the surface layer comprises at least a surface resin layer (5, FIG. 4 and associated text) comprised of a plastic material that withstands heat and pressure, a blocking layer (cured resin 6, FIG. 4 and associated text) for blocking an ooze out of an uncured material (uncured 3, FIG. 4 and associated text) of a thermosetting resin, and an impregnated paper layer formed by a paper impregnated with the thermosetting resin and cured (1, FIG. 4 and associated text, impregnated with same resin, 4:24-26), laminated from a surface side; at least an uppermost surface of the base material layer comprises the impregnated paper layer (1 and 4, FIG. 4 and associated text, and 9:40-43-resin-impregnated laminated core papers (9:25-49) formed by the paper impregnated within the thermosetting resin and cured (9:14-45, the resin-impregnated within may be of any known curable resin-9:1-40); and a pattern ink layer (2, FIG. 4 and associated text). See also FIG. 3. Arai generally employs a urethane resin as the ionizing impregnating resin (7:25-35). Claims 1-7 are met.

Arai does teach thermosetting resins used in layers 3 and 1 (FIGS. 2-3 and associated text), but does not explicitly state the surface resin layer (5, FIG. 4 and associated text) is made of a cured material of an ionizing radiation curing resin.

However, because Arai teaches using thermosetting resins in layers 3



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and 1 that withstand the heat and pressure of the decorative laminate and teaches that surface layer 5 may be generally of a plastic material having those characteristics of layers 3 and 1, it would have been an obvious choice to choose the same material of 3 and 1 for 5.

It would have been obvious to one having ordinary skill in the art to have modified the surface material of the decorative material of Arai to have it comprise an ionizing radiation curing resin because Arai suggests using plastic material that withstands heat and pressure and Arai teaches using ionizing curable resins for withstanding heat and pressure (see Examples 1-3, 9:40-60).

To instant claim 10, Arai teaches the multi-layer decorative material set forth above, is in sheet form. That a base material is to be adhered is to intended use and is suggestive language. It has been held that a recitation with respect to the manner in which a claimed product is intended to be employed does not differentiate the claimed product from a prior art product satisfying the claimed structural limitations. *Ex parte Masham*, 2 USPQ2d 1647 (1987). Language that suggests or makes optional but does not require steps to be performed or does not limit a claim to a particular structure does not limit the scope of a claim or claim limitation.

Claims 8-9 and 11-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Arai et al., over Takemoto, and Takeuchi et al. in view of Rosenkranz et al.

Arai et al., Takemoto, and Takeuchi essentially teaches the claimed invention.

Arai et al., Takemoto, and Takeuchi explicitly teach a two component urethane resin as per Claims 8-9 and 11-12, but Arai does teach in general using urethane resins as the

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impregnating resin for papers, fabrics, and nonwovens. Takemoto and Takeuchi teaches two component urethanes.

Rosenkranz teaches a two component urethane acrylate impregnating resin (2: 31-42) comprised of alkylene oxides, such as ethylene oxide (3:1-33) in the B component for impregnating to strengthen textile webs and coloring purposes.

It would have been obvious to one having ordinary skill in the art to have modified the decorative material of Arai, Takemoto and Takeuchi to include a urethane acrylate resin comprising ethylene oxide as claimed because Rosenkranz teaches a two component urethane resin assists as an impregnate used in webs for strengthening and coloring purposes (Abstract, 2: 31-42, 3:1-33).

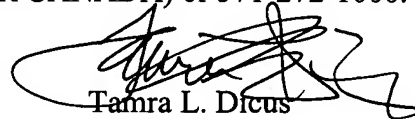
### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tamra L. Dicus whose telephone number is 571-272-1519. The examiner can normally be reached on Monday-Friday, 7:00-4:30 p.m., alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rena Dye can be reached on 571-272-3186. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.




Tamra L. Dicus

Examiner

Art Unit 1774

June 11, 2007

  
RENA DYE  
SUPERVISORY PATENT EXAMINER  
AU 1774